CLAIM AMENDMENTS

Claims 1-10 (Cancelled).

11. (Currently Amended) A multi-layer foil suitable for forming electrical resistors for inclusion in a printed circuit board comprising a copper metal layer having two opposite sides, one side having a shiny surface and the opposite side having a matte surface, and an electrically resistive composite material layer on the copper metal layer shiny surface wherein the electrically resistive composite material layer includes from about 0.01 to about 99.9 area % of nickel and from about 0.01 to about 99.9 area % of particles of alumina; which multi-layer foil is formed by codepositing the alumina and the nickel onto the copper metal layer shiny surface by electrodeposition and wherein the electrically resistive composite material has a resistivity of from about 1 to about 10,000 ohms/square; and a surface of said copper metal layer having been provided with a silane adhesion promoting treatment, said treated surface being between the copper metal layer and the electrically resistive composite material layer.

Claims 12-29 (Cancelled)

30. (Previously Presented) The multi-layer foil of claim 11 wherein the electrically resistive composite material layer has been codeposited from an electrolyte solution having a pH of from about 2 to 6.

31. (Previously Presented) The multi-layer foil of claim 11 wherein the electrically resistive composite material layer has been codeposited from an electrolyte solution having a temperature of from about 25°C to 45°C.

32. (Previously Presented) The multi-layer foil of claim 11 wherein the electrically resistive composite material layer has been codeposited from an electrolyte solution

including from about 20 to about 250 g/l of nickel sulfamate and from about 10 g/l to about 300 g/l or more of alumina.

33. (Previously Presented) The multi-layer foil of claim 11 wherein the electrically resistive composite material layer has been codeposited from an electrolyte solution having a pH of from about 2 to 6, a temperature of from about 25°C to 45°C, and includes from about 20 to about 250 g/l of nickel sulfamate and from about 10 g/l to about 300 g/l or more of alumina particles.

34. (Previously Presented) The multi-layer foil of claim 11 wherein the alumina particles have a mean particle size ranging from about 0.01 to about 20 microns.

35. (Previously Presented) The multi-layer foil of claim 34 wherein the alumina particles have a mean particle size of less than about 1.0 microns.

36. (Cancelled)

Please cancel claim 36.

Please add the following new claims:

37. **(NEW)** A multi-layer foil comprising an electrically conductive metal layer, a silane adhesion promoting layer on the electrically conductive metal layer, and a layer of electrically resistive composite material on the silane adhesion promoting layer, which electrically resistive composite material comprises a uniform mixture of an electrically conductive material and an electrically non-conductive material.

38. **(NEW)** The multi-layer foil of claim 37 wherein the electrically conductive metal layer comprises copper.

39. **(NEW)** The multi-layer foil of claim 37 wherein the electrically conductive material

is selected from the group consisting of antimony, arsenic, bismuth, cobalt, tungsten, manganese, lead, chromium, zinc, palladium, phosphorus, sulfur, carbon, tantalum, aluminum, iron, titanium, chromium, platinum, tin, nickel, silver, copper, and combinations thereof.

40. **(NEW)** The multi-layer foil of claim 37 wherein the electrically conductive material comprises nickel.

41. **(NEW)** The multi-layer foil of claim 37 wherein the electrically non-conductive material of the electrically resistive composite material layer comprises an electrically non-conductive particulate material selected from the group consisting of metal oxides, metal nitrides, ceramics, and mixtures thereof.

42. **(NEW)** The multi-layer foil of claim 41 wherein the electrically non-conductive particulate material is selected from the group consisting of boron nitride, silicon carbide, alumina, silica, platinum oxide, tantalum nitride, talc, polyethylene tetra-fluoroethylene (PTFE), epoxy powders, and mixtures thereof.

43. **(NEW)** The multi-layer foil of claim 37 wherein the amount of electrically non-conductive material in the electrically resistive composite material ranges from about 0.01 to about 99.9 area % and wherein the amount of electrically conductive material in the electrically resistive composite material ranges from about 0.01 to about 99.9 area %.

44. **(NEW)** The multi-layer foil of claim 37 wherein the electrically resistive composite material has a resistivity of from about 1 to about 10,000 ohms/square.

45. **(NEW)** The multi-layer foil of claim 37 wherein the electrically conductive metal layer comprises copper, the electrically conductive material comprises nickel, and the electrically non-conductive material comprises alumina.

46. **(NEW)** A multi-layer foil of claim 37 wherein the electrically resistive composite

material has been formed by codepositing the electrically non-conductive material and the electrically conductive material onto the silane adhesion promoting layer by electrodeposition.

47. **(NEW)** A multi-layer foil comprising a copper layer having a matte surface and a shiny surface, a silane adhesion promoting layer on the shiny surface of the copper layer, and an electrically resistive composite material layer on the silane adhesion promoting layer wherein the electrically resistive composite material layer comprises from about 0.01 to about 99.9 area % of an electrically conductive metal other than copper and from about 0.01 to about 99.9 area % of particles of an electrically non-conductive material selected from alumina, boron nitride, and mixtures thereof.

48. **(NEW)** A circuit board comprising an insulative substrate layer and the multi-layer foil of claim 37 on the substrate.